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**Centered on Service** is dedicated to sharing success stories, information, and updates on FHWA Resource Center projects, as well as ongoing news about services provided by the Resource Center teams to the FHWA Division Offices, Headquarters Offices, and State partners.

# Construction & Demolition Materials: Not Just for Landfills Anymore!

We see them everywhere we go, reminders to reuse and recycle objects we use everyday. They range from the ever-popular barrels used to collect cans and bottles to more sophisticated operations to recycle consumer electronics. Many grocery stores collect plastic bags. Some shops even offer bag "bounties" of a few cents as an incentive for customers to reuse bags. Some grocery stores even sell reusable canvas tote bags to use in lieu of disposable plastic and paper ones.

Reuse and recycling of previously discarded materials can save money and energy.

But what about the reuse and recycle of materials from construction and demolition activities? Many of us think of these items as worthless junk or debris. Except when an overlooked architectural treasure gets salvaged by an enterprising dumpster diver, we

usually think of this material as unwanted and useless. Its only conceivable destiny is a landfill, right?

#### Wrong!

Increasingly, government agencies, businesses and non-profit organizations have discovered that construction and demolition materials (CDM) can be successfully reused and recycled. In some cases, they have been found to perform as well as or better than new materials.

So many activities, so much stuff. Where does this material come from? A surprisingly wide range of activities generate CDM. They include:

- Site clearance and excavation
- New construction
- Renovation and repair
- Demolition
- Roadway projects
- Bridge construction or reconstruction
- Disaster clean-up

See RECYCLE on page 2

#### RECYCLE from page 1

Even new construction can generate these materials. Think about a contractor building a home. No matter how carefully he or she measures the attic, walls, floors, or countertops, there will always be a little "extra" to take into account for measurement errors or even a bad cut that just won't do. The leftover material used to be routinely discarded in public or private landfills or waste pits.

#### There is a Better Way

During a web conference sponsored by the U.S. Environmental Protection Agency (EPA) on February 21, 2008, participants learned about a completely different approach. Bob Brickner, Executive Vice President of Gershman, Brickner, and Bratton, Inc., presented a fascinating case study from Nashville, TN. The City of Nashville decided to dismantle and demolish a 30-year-old waste-toenergy facility. The original cost of the project was estimated at \$2.4 million. Of the more than 66,000 tons of material generated, 98.5 percent was reused or recycled. The net cost, after reuse and recycling, was just \$115,000. As Brickner explained, by reusing and recycling almost all of the material, the city effectively gave itself a \$2 million grant to use for other purposes.

#### How CDM Can Be Reused and Recycled

In the Nashville example, a number of strategies for reuse and recycle were used. Concrete, which made up more than 70 percent of the CDM by weight, was crushed and turned into aggregate. Asphalt was also crushed and reused. Structural metal, rebar, and other reusable items were auctioned for recycling.

Some items, of course, could not be reused. Asbestos, a regulated hazardous material, was sent to a landfill.

#### **Highway Agencies are Leading the Way**

Highway agencies have pioneered the practice of reuse and recycle of roadway materials. Concrete and asphalt can be recycled into materials that perform as well as or better than newly processed material, at a fraction of the cost. Highway agencies also recycle structural steel when transportation facilities are repaired or rehabilitated.



In 2002, the FHWA issued the following recycled materials policy:

- 1. Recycling and reuse can offer engineering, economic and environmental benefits.
- 2. Recycled materials should get first consideration in materials selection.
- Determination of the use of recycled materials should include an initial review of engineering and environmental suitability.
- 4. An assessment of economic benefits should follow in the selection process.
- Restrictions that prohibit the use of recycled materials without technical basis should be removed from specifications.

The entire policy memo can be viewed at: www.fhwa. dot.gov/legsregs/directives/policy/recmatpolicy. htm

The Turner-Fairbank Highway Research Center has published a booklet titled *User Guidelines for Waste and By-Product Materials in Pavement Construction.*The document describes numerous materials that can be recycled for highway applications. It is available free of charge at <a href="https://www.tfhrc.gov/hnr20/recycle/waste/begin.htm">www.tfhrc.gov/hnr20/recycle/waste/begin.htm</a>.

In addition, the FHWA and the EPA jointly fund the Recycled Materials Research Center. Based at the University of New Hampshire and University of Wisconsin-Madison, the Center's mission is to "overcome barriers to use of recycled materials in the highway environment." More information about the Center can be found at <a href="https://www.recycledmaterials.org">www.recycledmaterials.org</a>.

See RECYCLE on page 10

#### **TECHNICAL ASSISTANCE**

# Communities of Practices - Finding Solutions Together

The FHWA offers a valuable resource to the transportation community: Communities of Practice (CoP). Through these CoPs, the highway community can work together to share ideas, find solutions, and discover innovations.

The term community of practice was first used in 1991 by researchers Jean Lave and Etienne Wenger at



the Institute for Research on Learning. On his website (www.ewenger.com/), Wenger defines communities of practice as, "... groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly."

Wenger also outlines a variety of activities of CoPs:

- Problem solving
- Sending out requests for information
- Seeking experience (best practices, recommendations)
- Reusing assets (allowing someone to piggyback on earlier efforts and not reinvent the wheel)
- Coordination and synergy (working together to achieve a result neither party could achieve on their own, sharing costs, obtaining bulk discounts)
- Discussing developments (sharing information about new technologies)
- Documentation projects (developing manuals & guides)
- Site visits, observing best practices, viewing product demonstrations
- Mapping knowledge and identifying gaps (who knows what, who is an expert on X, what knowledge is missing).

According to Peter Eun, manager of the Safety Exchange CoP, "Members can get the most out of the CoP by participating. The more people participate, whether asking or responding to questions and comments, or just posting information the more everyone will benefit." Because participation is such a

key component of a functioning CoP, it is important that as many people as possible are aware of and use the communities of practice available through the FHWA.

There are two main groups of CoPs hosted by FHWA. The first group comprises CoPs that are open to anyone inside or outside of FHWA. These groups can be found at <a href="http://knowledge.fhwa.dot.gov/cops/FHWAKnow.nsf/pages/index.html">http://knowledge.fhwa.dot.gov/cops/FHWAKnow.nsf/pages/index.html</a>.

The following CoPs are open to anyone:

- AASHTO Transportation Asset Management Today
- Disadvantaged Business Enterprise Exchange
- High Performance Concrete
- Highways for LIFE
- "It All Adds Up to Cleaner Air" Exchange
- LearningForum@FHWA
- Manual on Uniform Traffic Control Devices
- NTIMC Traffic Incident Management
- Performance Measurement Exchange
- Re: NEPA
- Real Estate Exchange
- Rumble Strips
- Safety Roadside Hardware
- National Transportation Operations Coalition
- Highway Community Exchange:
  - Alternative Contracting
  - Detectable Warnings
  - Highway Finance Data Collection
  - Highway Performance Monitoring System (HPMS)
  - Household Travel Data Program
  - Knowledge Management Practice
  - LTPP Standard Data Release
  - Marketing and Communications
  - Midwestern Transportation Research Network
  - Motor Fuel Reporting and HTF Attribution
  - National Highway Visibility
  - NCHRP 1-37A (Mechanistic-Empirical)
    Pavement Design Guide
  - Performance Measurement
  - Road Weather Management and Operations
  - Rural ITS
  - State Standards Engineer
  - Surface Transportation Finance
  - Tennessee Air Quality and Transportation Conformity
  - Transportation Conformity
  - Transportation Education and Research
  - Travel Monitoring
  - TRB International Sub-Committee of the Accessible Transportation and Mobility
  - Value Pricing
  - Work Zones
  - Working Together for Highway Workforce Development

See CoP on page 4

#### CoP from page 3

The second group of CoPs is made up of resources that are internal to employees of the FHWA and require user names and passwords in order for anyone to read or comment on the posts. The group can be accessed here: <a href="http://knowledge.fhwa.dot.gov/cops/FHWAKnow.nsf/pages/internal\_communities.html">http://knowledge.fhwa.dot.gov/cops/FHWAKnow.nsf/pages/internal\_communities.html</a>.

The CoPs available to internal FHWA employees include:

- Administrative Skills and Knowledge Exchange
- Corporate Management Strategies Exchange
- Design Exchange
- Implementing Research & Technology Exchange
- Knowledge Exchange
- Leadership Exchange
- Operations Exchange
- PeopleLink
- Planning
- Professional Development Program
- Safety Exchange
- Technical Discipline Exchange

As Eun states, "I personally find the CoP a great tool to provide and obtain information to help me do my job more effectively and efficiently . . . . I've heard new safety engineers say it saves them time in getting up to speed."

So, please visit the appropriate site and become acquainted with the CoPs. They may prove to be a valuable resource for your job and for your community. And your knowledge may prove valuable to a CoP as well.

Spotlight on Financing Pooled-Fund Transportation Projects

The FHWA Resource Center Finance Services Team recently participated in the Transportation Pooled-Fund (TPF) Program webinar hosted by the FHWA

Turner-Fairbank Highway Research Center.

This webinar covered issues relating to the TPF program, particularly new financial procedures. The event was also widely attended--with more than 85 representatives from the FHWA division offices, HQ, and State departments of transportation participating in the webinar.

Participating stakeholders learned about new financial procedures (including provisions for transferring funds) and what is being done with existing projects. The webinar also provided an opportunity for all stakeholders to engage in a discussion about the TPF program guidance including solicitations for projects, transfer of funds, project management during the course of the project, project closeout, lock box process enabling non federal partners (industry) to participate in projects, and financial reports.

A taskforce has been developed to:

- 1. improve communication among stakeholders in pooled-fund projects,
- address outstanding concerns related to existing processes and procedures, and
- 3. develop program management procedures.

Part of this initiative includes the reconciliation of financial records from existing projects.

The FHWA Quality Assurance (QA) team, under the direction of the Office of the Chief Financial Officer, has been leading the reconciliation effort with assistance from the Resource Center's Finance Services Team. Opportunities for improvement in processes, user information needs, and financial reporting are being explored and implemented.

Webinar attendees expressed interest in the topics and requested more, on-going communication regarding the TPF program in the future. The Finance Services team will continue to provide subject matter expertise in this area to the QA team and moderate discussion and interaction with stakeholders as this initiative moves forward.

For more information on this program or for answers to Federal-aid financing questions, contact:

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#### **TECHNOLOGY DEPLOYMENT**

# PDS Update: Showcasing roundabouts in La Jolla traffic improvement project

Technical staff from the FHWA Resource Center recently met with representatives from the City of San Diego to explore the possibility of jointly hosting a Product Demonstration Showcase (PDS) at roundabout intersection projects in the area. Members of both the FHWA Resource Center's Safety & Design and Communications & Marketing teams facilitated this PDS planning session.

The proposed PDS (planned for December 2008) will focus on a case study involving traffic improvement projects on La Jolla Boulevard. The intersection sees a high volume of traffic (20,000 + ADT) and there had been concern about how to slow traffic down, while at the same



Roundabout at La Jolla Boulevard and Midway

Status Report - Other Upcoming PDS			
Scheduled Date	PDS Subject	Location	Partners
April 24, 2008	Highway Safety Corridor	Vancouver, WA	City of Vancouver, NACE, Washington State DOT
May 1, 2008	Prefabricated Bridge Elements/ Design & Build	Georgia	Georgia DOT, Georgia FHWA Division Office, FHWA Resource Center
May 28, 2008	MDSS	Omaha, NE	AASHTO, Nebraska LTAP, NDOR, FHWA, City of Den- ver, Colorado DOT
September 2008 Date TBD	MDSS	Boise, ID	AASHTO, FHWA Resource Center, IDOT, TIG



Center island foliage at roundabout in LaJolla, CA.

time enhance the walk-ability of the Boulevard. The city opted to pursue the construction of three roundabouts, which will all be featured in the PDS site visit.

The PDS will include information about the involvement of the community and businesses and how they worked together to provide input in the initial phases of the roundabouts. Other topics include outreach and community education, pedestrian crossing safety, funding, constraints

on right-of-way issues, construction management and roundabout design improvements which arose from lessons learned during the project.

In addition to the City of La Jolla and the FHWA Resource Center, other partners and agencies will be involved in the PDS including: Councilman Scott Peters, the FHWA Office of Safety, the FHWA's California Division Office, the Western Operation Center, the California LTAP, the Bird Rock Community Council, Hard Hat Communications, Project Design Consultants and Boyle Engineering.

For more information on this PDS contact:

Mark Sandifer
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FHWA Resource Center
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mark.sandifer@dot.gov

### Need Help with a Wall Project?

#### Soil Nail Showcase Offered

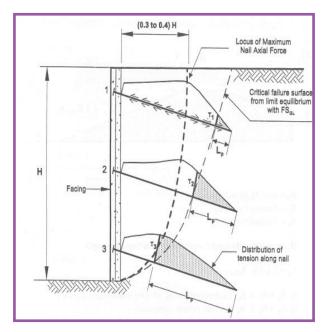
The Soil Nail Showcase is a technology deployment package offered by the FHWA Resource Center to a State department of transportation (DOT) that is planning to design and construct a soil nail wall on a future project. Target audiences include those that have either never built a soil nail wall or those that need a refresher course because it has been a long time since they have done so.

#### A Three-part Program

The Soil Nail Showcase consists of three parts: 1) a two-day workshop that covers soil nail wall design on the first day and soil nail wall construction inspection and soil nail testing on the second day; 2) technical assistance to review and comment on state or consultant prepared soil nail wall designs, contract plans and specifications; 3) on site technical assistance for soil nail wall inspectors on how to inspect soil nail wall construction, soil nail load testing, and how to prepare and complete construction and testing documentation.

#### Day 1

The first day of the workshop is on design and the target audience is geotechnical and structural engineers. An overview session covers the basics of design and construction of soil nail walls because it is essential for soil nail wall designers to be familiar with soil nail wall construction practices. The topics covered include site investigation and sample testing, simplified design charts, a computer program demonstration, and other design considerations.

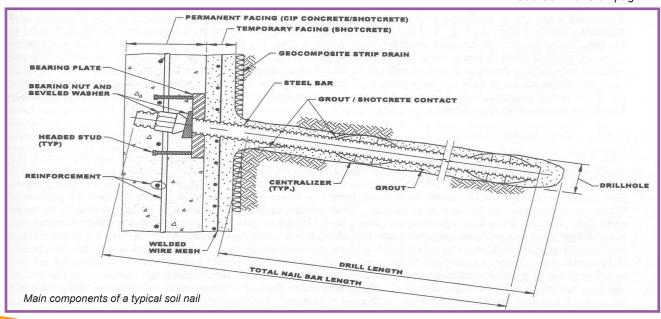


Schematic location of soil nail maximum tensile force

#### Day 2

The second day of the workshop is on construction inspection and the target audience is construction engineers and inspectors. Again, because it is essential for soil nail wall inspectors to be familiar with certain aspects of soil nail wall design, another overview session will be featured to cover the basics of design and construction. The topics covered include contract documents, quality control, construction monitoring and documentation, soil nail testing, and construction problem solving.

See Soil Nails on page 7



#### Soil Nails from page 6



Soil nail verification load test

The workshop is designed so that it can be delivered as either two stand-alone 1-day workshops or the full 2-day workshop. This way, the State DOT can choose to either have the same audience attend both days or have target audiences attend either of the two days.

State DOTs that want to request technical assistance reviewing soil nail wall designs, contract plans and specifications should contact the FHWA Resource Center.

Technical assistance on construction inspection is meant as a follow-up to the construction inspection workshop but can be requested regardless of whether the State DOT has hosted the workshop. This assistance involves an FHWA technical expert in soil nail design and construction going to a State DOT soil nail wall construction site and working hands-on with inspectors to perform field quality control of materials, inspect soil nail wall construction, monitor soil nail testing, and complete soil nail construction documentation.

To date, the Soil Nail Showcase has been delivered in Arizona, Missouri, and Nebraska to approximately 200 design and construction personnel with the DOTs and their consultants. The result has been a better understanding of soil nail wall technology, improved construction specifications and fewer problems during construction.



Temporary shotcrete facing

For more information contact:

Barry D. Siel, P.E. Sr. Geotechnical Engineer FHWA Resource Center (720) 963-3208 barry.siel@dot.gov

#### **TRAINING**

2008 National Hydraulic Engineering Conference

# Partnering for Progress in a Changing Environment

Surface transportation agencies face ever-increasing challenges imposed by broadening environmental considerations, dwindling human and financial resources, aging infrastructure and assets, and hydrological consequences of global climate change. Therefore, it is critical for project stakeholders to pool knowledge and resources. In recognition of today's complex and dynamic work environment, the Federal Highway Administration, in partnership with the Maine Department of Transportation, the American Association of State Highway and Transportation Officials, and the U.S. Army Corps of Engineers' Cold Regions Research Laboratory (CRREL), is making plans for the 2008 National Hydraulic Engineering Conference (NHEC).



The conference theme is "Partnering for Progress in a Changing Environment," to emphasize the vital roles of multi-faceted project teams and

collaborations in successful project development and implementation. The conference will equip participants with enhanced knowledge and tools to meet current and future challenges in hydraulics engineering. It will feature presentations and exhibits focusing on the use of partnerships in conjunction with current research studies, state-of-the-art technologies, and design approaches.

Conference presentations will be organized into the following session topics:

- Automating Hydrology & Advancements in Hydrology
- Climate Change Impacts on Transportation
- Asset Management Doing More with Less
- Partnering in Research
- Fish Passage The Progress & The Partnerships
- Coastal/Tidal Environment
- Water Quality Partnering for an Improved Environment
- Bridge/Culvert Hydraulics and Scour The Progress
- Innovative Solutions to Hydraulics Issues
- Progress through Partnerships Consultants, Universities, Agencies

The most up-to-date agenda and other conference details are available on the Web at: www.maine.gov/mdot-stage/nhec/. The 2008 NHEC will be held at the Holiday Inn by the Bay in Portland, ME, from August 26 - 29, 2008.

To make a room reservation, call 1-800-345-5050 or go online at **www.innbythebay.com**/.

Please specify the "Hydraulic Engineering Conference" when making your reservation to get the conference group rate.

The deadline for reservations is July 24, 2008.

An early registration fee of \$200 has been established for this conference. Each attendee should complete his/her pre-registration at the conference Web site prior to August 15, 2008, to be eligible for the \$200 early registration fee. After this date, the registration fee becomes \$250.

The conference Web site can be accessed on the web at: www.maine.gov/mdot/workshops-conferences-events/workshops-events.php.

#### ROADTRIP ALSO PLANNED

In addition to the presentation sessions, the conference will feature a tour of the CRREL Laboratory in Hanover, NH.

This lab performs unique research of hydraulic issues related to cold regions. For example, the lab researches the ice flows/dams etc and the hydraulic impact on bridges and other transportation structures.

To learn more about this facility, please visit the following Web site: www.crrel.usace.army.mil/.

Appropriate division staff, corresponding State and local agency staff, and surface transportation professionals from related technical disciplines (e.g., hydraulics engineers, environmental engineers and specialists, and roadway designers) are encouraged to attend this conference.

For more information, contact:
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Cynthia Nurmi Hydraulics Engineer FHWA Resource Center (404) 562-3908 cynthia.nurmi@dot.gov

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# Attendees Rate Bridge Security a Hot Topic

The FHWA Resource Center's Structures
Technical Service Team (TST) recently delivered both
its Risk Management for Terrorist Threats to Bridges
and Tunnels workshop and the First Responder
Awareness for Terrorist Threats to Bridges and Tunnels course to law enforcement and transportation
professionals in New Jersey.

The half-day First Responder Awareness for Terrorist Threats to Bridges and Tunnels course was attended by 65 participants, most of which were representing New Jersey State Police and local police departments from across the State. Other



First responders and emergency personnel arrive at the scene of a tunnel fire.

participants represented State and local fire officials, the U.S. Army, the NJ Office of Homeland Security and Preparedness, and the local nuclear power plant. Based on participant evaluations, the course received an overall score of 4.51 out of 5 and the attendees said their knowledge and confidence in the subject area increased by 70 percent.

The 1 ½-day Risk Management workshop drew 24 attendees. This workshop was attended by FHWA's New Jersey Division Office bridge staff, State and local transportation departments, local prosecutor offices, the NJ Turnpike Authority, the U.S. Coast Guard, the NJ Office of Homeland Security and Preparedness, and the Delaware Valley Regional Planning Commission. The workshop received a score of 4.84 out of 5 and the participants said their knowledge and confidence in the subject increased by 90 percent. *Unfortunately, only 2/3 of the participants from Thursday were able to attend on Friday due to a snow storm. Consequently, evaluations were received from only those who attended on Friday.* 

This is the second time the courses have been requested by the NJ Office of Homeland Security and Preparedness. More than 160 people have participated in these courses in the past 12 months.

For more information, contact:

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## Corrosion-resistant Reinforcing Bar Seminars Held in NY, KY, and RI

During February and March, the Resource Center's Structures TST conducted corrosion-resistant reinforcing bar seminars for the benefit of FHWA division offices, State DOTs, private consultant firms, and industry suppliers. Two sessions were held in upstate New York in mid-February, attracting more than 90 attendees at the Albany event, and 25 at the Syracuse event. Industry suppliers spoke on such topics as solid stainless steel; stainless steel-clad; micro-composite metallic; hot-dipped galvanized; and a multi-year laboratory investigation of alternative rebar -- a combination of zinc and epoxy coating. A Resource Center senior structural engineer also discussed fiber-reinforced polymer composite rebar; and the deployment and cost considerations for new products.

The following week, the instructor group headed to Louisville, KY, to provide a similar event. This seminar was attended by consultants and FHWA engineers assigned to two major bridge crossing projects that connect Indiana and Kentucky.

Finally, the group delivered the program to personnel in Providence, RI, who were involved with a major project there -- the Sakonnet River bridge. Both the Kentucky and the Rhode Island seminars were held in a very timely manner in relation to project authorizations.

These seminars provided a great avenue for the exchange of technical information between bridge owners and the multitude of reinforcing bar suppliers. Attendee evaluations were very positive, reflecting the usefulness of the wealth of information gained.

If you have questions about the seminars or you would like to host a seminar in your State, please contact:

Louis N. Triandafilou Sr. Structural Engineer FHWA Resource Center (410) 962-3648 lou.triandafilou@dot.gov

#### **RECYCLE** from page 2

NC DOT provides recycling receptacles at rest areas and welcome centers. (NC DOT photo)



TX DOT used small pieces of recycled glass in road base for this project in Abilene. Glass is readily available from community recycling programs. (TX DOT photo)

#### **Turning Trash Into Opportunity**

CDM may not constitute anyone's definition of treasure. But a broad coalition of agencies, organizations and private sector stakeholders are recognizing that hauling and disposing of CDM in landfills has become costly, and in some cases, environmentally unacceptable. Reuse and recycling of CDM represents opportunities to turn large volumes of material into useful commodities. In a time of soaring energy costs and dwindling disposal space, these opportunities deserve careful consideration whenever activities that generate CDM are planned.

For more information on recycling and the reuse of pavements, please contact:

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Special thanks to Mary Ann Rondinella, Environmental Specialist, FHWA Resource Center, for contributing this article as we celebrate Earth Day, Tuesday, April 22, 2008.

# "Above and Beyond: The Environmental and Social Contributions of America's Highway Programs"

The American Association of State Highway and Transportation Officials (AASHTO) has issued a new report -- titled "Above and Beyond: The Environmental and Social Contributions of America's Highway Program." The report focuses on how highway programs are connecting and enhancing communities and the natural environment. The report also contains information and fascinating case studies for several topics ranging from transportation and land use planning to noise walls. The report includes a chapter on recycling efforts, featuring case studies from Minnesota and Texas. This report can be viewed and downloaded free of charge at the AASHTO Center for Environmental Excellence website, at http://environment. transportation.org/center/products programs/above beyond.aspx.

#### **PARTNERSHIPS**

## 25<sup>th</sup> Annual International Bridge Conference slated for June 2-4, 2008

The Federal Highway Administration (FHWA) will be the *Featured Agency* at this year's International Bridge Conference (IBC). As the *Featured Agency*, the IBC Executive Committee "sought to invite the single agency that represents all of the bridge community, funds much of the infrastructure development in the United States, and provides leadership worldwide" -- and we are pleased to report that the FHWA was their choice. The FHWA has accepted the IBC's invitation and has developed an exciting, landmark program featuring a host of presentations dealing with the Federal-aid highway program itself, as well as major projects, and substantial issues reflective of the challenging times on the horizon.

The keynote session will feature nationally recognized leaders:

- U.S. Secretary of Transportation Mary Peters (invited);
- Dr. Peter Ruane; President & CEO of the American Road & Transportation Builders Association; and,
- John Horsley, Executive Director of the American Association of State Highway and Transportation Officials.



Mary Peters , U.S. Secretary of Transportation

The IBC is the pre-eminent arena for the bridge industry in North America, Europe and Asia to share information. Currently in its 25th year, the Conference annually attracts more than 1,200 bridge owners and engineers, senior policy makers,

#### **Training Opportunities**

The IBC is excited to offer these training seminars:

- The Use of Strut and Tie Modeling (1/2 day seminar)
- Getting the Best Proposal and Project (1/2 day seminar)
- Integral Abutments (1/2 day seminar)
- NHI Course No. 130081, LRFD for Highway Bridge Superstructures – Concrete (2 day seminar)
- NHI Course No. 130081A, LRFD for Highway Bridge Superstructures – Steel (2 day seminar)

government officials, bridge designers, construction executives, and suppliers from throughout the United States and abroad. In 2007, participants came from 46 States and 15 countries.

The Conference will also feature a substantial expansion of its Technical Program. The additional meeting space and presentation rooms at the Pittsburgh Convention Center will allow the IBC to offer more than 80 technical presentations from well qualified authors. Technical sessions will cover topics such as Design, GeoTechnical, Inspection/Analysis, Long Span Bridges, Accelerated Bridge Construction, Construction, Historic Structures, Rehabilitation, and Seismic.

The 2008 IBC will be held at Pittsburgh's new David L. Lawrence Convention Center. The conference hotel headquarters will be the Westin Convention Center Hotel. The relocation of the Conference has allowed for major changes in the Exhibit Hall, a major feature of the Conference. There will be more than 150 exhibitors at IBC 2008 (an all time high) -- all providers of goods and services to the bridge industry.

For more information about the 2008 IBC agenda, or to register on-line, visit the web at: <a href="https://www.eswp.com/bridge/bridge\_reg\_form\_skipjack.htm">www.eswp.com/bridge/bridge\_reg\_form\_skipjack.htm</a>

#### New Workshops:

The IBC is pleased to welcome workshops from a myriad of groups including:

- The American Association of Highway and Transportation Officials (AASHTO) TIG
- American Composites Manufacturers Association (ACMA)
- ADSC The International Association of Foundation Drilling
- American Galvanizing Association (AGA)
- American Railway Engineers and Maintenance of Way Association (AREMA)
- Bridge Construction Workshop, by IBC Construction Committee
- Construction Technology Laboratories (CTL Group) on Bridge Failures
- FHWA ABC/HFL
- FHWA Heat Straightening
- The National Steel Bridge Alliance (NSBA)
- Pennsylvania Department of Transportation (PennDOT)
- SSPC: the Society for Protective Coatings (SSPC)
- Subcommittee For Economic Fabrication (SCEF)
- Transportation Research Board (TRB)
- University of Pittsburgh's Western PA Transportation Research Forum

#### **SPECIAL FEATURE**

The Green Highway
Partnership:
Promoting
Environmental
Stewardship for our
Transportation Infrastructure

The Federal Highway Administration (FHWA) is proud to be a national leader in the Green Highway Partnership (GHP), a voluntary public/private initiative to promote environmental stewardship and streamlining for transportation infrastructure. The GHP began in the Mid-Atlantic region and remains very active there. Numerous GHP activities and projects have been completed by State agencies in MD, VA, NJ, NY, WV among others. These GHP efforts have involved partners such as the Environmental Protection Agency (EPA), various industrial and commercial partners, and associations such as the American Concrete Pavement Association and the National Asphalt Pavement Association. Although different projects may bring different partners together, they are all concerned about creating a transportation system that serves the needs of America's citizens while minimizing the environmental impacts created by that system.

The GHP concept is spreading rapidly throughout other regions of the United States as an extensive network of environmental, industrial, and governmental partners begins to consider how to apply the concept of sustainability to our highway infrastructure. High-level meetings between the FHWA and the EPA are underway to solidify the efforts nationally. Topics being discussed include the creation of a national awards program, methods to share best practices, and the development of regional and national rating systems to encourage the use of green technologies in highway design, construction, operations, maintenance, and preservation.

For more information on the Green Highway
Partnership, please visit <u>www.greenhighways.org</u>
or contact

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# Green Highway Program Leadership Forum & Recognition Program Awards

At a recent recognition ceremony in Washington, D.C., King Gee, FHWA's Associate Administrator for Infrastructure, was presented a Green Highway Program (GHP) Leadership Award for his efforts with the GHP, along with those of Fred Skaer, Director, Office of Project Development & Environmental Review, and Nelson Castellanos, FHWA Maryland Division Administrator. Of the acknowledgment, Gee said, "Stewardship of our Federal financial resources and the National Highway System has always been a key component of the Office of Infrastructure's mission, and I am very pleased that we are now being recognized for our efforts to be good stewards of our environmental resources as well. Our staff is dedicated to supporting successful programs and projects that have carefully considered the three E's of our profession: Engineering, Economics, and the Environment."



King Gee accepts the Green Highway Program Leadership Award for his enthusiastic support of the FHWA's involvement in GHP efforts. The award was presented by Gloria Shepherd, Associate Administrator of Planning, Environment, & Realty, at a ceremony held on January 15, 2008, in Washington, D.C. The inscription reads, "Recognizing King Gee For Exemplary Leadership Towards Achieving the GHP Mission "Better than Before" 2008."

In addition the aforementioned FHWA executives, EPA staff that were recognized included Maria Vickers, Jon Capacasa, John Pomponio, and Craig Hooks. David Goss of the American Coal Ash Association, and Neil Weinstein of the Low Impact Development Center were also honored for their efforts with the GHP. Neil J. Pedersen, Administrator of the Maryland State Highway Administration, was also recognized for his work within AASHTO and within his State to promote the concepts of the GHP.

#### FHWA's Use of Recycled Materials Policy

The FHWA has long supported recycling, and issued our current formal policy on the Use of Recycled Materials on February 7, 2002 in a memorandum by then FHWA Executive Director Bud Wright. In the memo, Wright stated "The policy outlines the importance of re-using materials previously used in constructing our Nation's highway system, and calls upon us, and the State transportation departments, to explicitly consider recycling as early as possible in the development of every project." The memo went on to say: "Moreover, the new policy has the potential to strengthen the relationship between the FHWA and the Environmental Protection Agency, and to forge new partnerships among government, industry, and academia. By providing leadership and technical guidance to the transportation community, the FHWA will stimulate advancements in recycling technology and the discovery of new opportunities for the appropriate use of recycled materials." The Green Highway Partnership (GHP) fits the vision outlined in the memo.

The GHP is just one of a number of efforts that have been undertaken by the FHWA in the ensuing years. The FHWA has long-supported the Recycled Materials Resource Center and the AASHTO Center on Environmental Excellence. The agency has developed and published numerous guidebooks on the use and re-use of a number of industrial by-products such as foundry sand, slag, and fly-ash in the construction of our transportation facilities. The FHWA has worked with industry associations such as the Asphalt Reclaiming and Recycling Association (ARRA) and the International Slurry Surfacing Association (ISSA), to promote recycling and preservation processes that are both economical and environmentally sensitive. Currently, the FHWA supports the Recycled Asphalt Pavement and the Warm Mix Asphalt Expert Task Groups in their efforts to expand the use of these energy-saving technologies within the HMA industry.

For more details on the FHWA's efforts in these areas, please visit: <a href="https://www.fhwa.dot.gov/pavement/recycling/">www.fhwa.dot.gov/pavement/recycling/</a>

#### Recycled Materials Resource Center News

The Recycled Materials Resource Center (RMRC), a joint effort of the University of New Hampshire and the University of Wisconsin at Madison, is under contract with the FHWA and the EPA to provide outreach services and research that advance recycling and re-use technologies. Please visit the new RMRC website: www.recycledmaterials.org for more

information on their activities and programs. State agencies that are interested in working together to answer any technical questions and issues on the use of recycled materials may want to consider participating in the pooled-fund study being organized by the FHWA and RMRC.

For more information on this contact Jeffery Melton at Jeffery.Melton@unh.edu.

#### Earth Day Activities: April 22, 2008

Two informative events concerning recycling technologies will take place on Earth Day, April 22, 2008. The events are FHWA sponsored webinars offered through the National Highway Institute training portal at <a href="https://www.nhi.dot.gov">www.nhi.dot.gov</a>.

The first webinar will be conducted by the Recycled Materials Resource Center. This webinar will help participants become acquainted with the activities and successes of the RMRC and will also provide information about the RMRC's pooledfund study. State agency materials and research engineers are encouraged to participate. They are also being asked to provide feedback on potential research projects that could be of benefit in their States. Please visit this site to register: www.nhi.fhwa.dot.gov/resources/webconference/create.aspx?webConfID=13933.

The second webinar will focus on In-Place Recycling Technologies. The webinar will feature speakers from FHWA, State agencies, and the Asphalt Recycling and Reclaiming Association. The webinar will feature brief overviews of the recycling processes, presentations on the FHWA's policies and the environmental benefits of these technologies. This webinar will serve as an introduction for the regional workshop, which will be held in Salt Lake City in June 2008. Potential workshop participants from WASHTO and the Rocky Mountain States are particularly encouraged to attend. Please visit this site to register: www.nhi.fhwa.dot.gov/resources/webconference/viewconference.aspx?webConfID=13647

Special thanks to Steve Mueller, Pavement Management Engineer, FHWA Resource Center, for contributing this article as we celebrate Earth Day, Tuesday, April 22, 2008.

#### **CENTERED ON RESULTS**

## FHWA Resource Center Welcomes New Team Member



#### **PLANNING TST**

Ralph Rizzo Community Planner (401) 528-4548 ralph.rizzo@dot.gov

Ralph Rizzo will be joining the Planning team as a technical specialist with a primary focus on fiscal constraint and financial planning. He will also be providing services in the area of freight financing as well as a number of topics within metropolitan and statewide transportation planning.

Rizzo has more than 11 years of experience in transportation planning experience with the FHWA. He started his career with the FHWA at Headquarters working as an Environmental Research Program Manager for 3 years in the Offices of Environment and Planning in the early and mid 1990s. Following this assignment, Rizzo moved to the Rhode Island Division Office, first as a transportation planner and then as a Team Leader for Program and Project Development, between 2003 and 2006. In this capacity, Rizzo supervised a team that guided the State of Rhode Island through the transportation planning, environmental impacts analysis and real estate acquisition phases. Rizzo's next assignment was as the division's team leader for project delivery in the Rhode Island Division Office. Prior to his employment by the FHWA, Rizzo worked at the EPA as a management analyst where he evaluated the effectiveness and efficiency of various functions and programs throughout the agency. Rizzo has a B.A. in History and M.A. in U.S. History from George Washington University.

# Resource Center Director Accepts Position as Director of Field Services (DFS) North

Joyce Curtis was recently selected for advancement into the Senior Executive Service position of Director of Field Services (DFS) - North. Curtis served as the Resource Center Director until March 17. As Resource Center Director, she led more than 168 professional and administrative staff members in 5 locations across the Nation. She was responsible for the overall direction of the Resource Center, including the technical assistance, project management, and technology deployment efforts of 14 technically specialized teams. Previously, she served as a Resource Center Manager -- a position that she held since June 16, 2002. From 1989 through 2002, Curtis was the Assistant Division Administrator in Virginia, where, in collaboration with the Division Administrator, she negotiated a new stewardship agreement and developed guidance for Public-Private Partnership initiatives. Prior to this assignment, she was the Director of Engineering and Operations for the former FHWA Region 3 Office in Baltimore, Maryland. Curtis earned a bachelor's degree in Civil Engineering from Villanova University, Villanova, PA.

With Curtis' departure, Resource Center Operations Manager Amy Lucero will serve as Acting Resource Center Director until that position is filled.

#### **CALENDAR OF EVENTS**

This *Calendar of Events* is presented to highlight upcoming conferences, workshops, and other special dates of interest to the transportation community.

Apr 7 - 12 - Basic Civil Rights Training (6-Pack) - Montgomery, AL - E-mail: Charles.Calloway@dot.gov

Apr 7 - 11 - Work Zone Awareness Week - More Info? Visit: www.workzonesafety.org/

Apr 07 - 10 - WASHTO - Construction & Materials Subcommittee - Portland, OR E-mail: barbara.harriman@odot.state.or.us

Apr 13 - 16 - Solutions to Coastal Disasters Conference 2008 - Honolulu, HI E-mail: ewatson@asce.org

Apr 13 - 15 - **Lifesavers 2008 Conference** (National Conference on Highway Safety Priorirites) - Portland, OR - E-mail: mmagnini@cox.net

Apr 16 - 18 - **TRANSPO 2008 Design-Build In Transportation Conference** - Louisville, KY More Info? Call: (202) 682-0110

Apr 21 - 23 - **NACE Annual Meeting** - Portland, OR More Info? Visit: **www.countyengineers.org**/

Apr 21 - 26 - **AAAA 34th Annual Conference** - Falls Church, VA - E-mail: camardem@jacksonlewis.com

Apr 21 - 24 - **Southwest Geotechnical Engineers Conference** - Corpus Christy, TX E-mail: dan.alzamora@dot.gov.

#### **Apr 22 - EARTH DAY**

Apr 22 - FHWA Roundabout Wksp - Nashville, TN

Apr 24 - Apr 26, 2008 - **Structures 2008 Congress** - Vancouver, Canada. More Info? Call: (703) 532 -3166 or E-mail vjohnson@asce.org.

Apr 28 - May 02 - **Road Safety Audit Peer to Peer** - Little Rock, AR,

May 4 - 7 - **Concrete Bridge Conf**. - St. Louis, MO More Info? Call: (847) 972-9101

May 4 - 8 - **AASHTO Spring Meeting** - Branson, MO - e-mail: hwhitney@aashto.org

May 4 - 6 - 4th Concrete Bridge Conference - St. Louis, MO - e-mail: sbhide@cement.org

May 11 - 17 - National Transportation Week - More Info? Visit: www.ntweek.org/

May 12 - 16 - World Environment & Water Resources Congress - Honolulu, HI E-mail: adicken@asce.org

May 18 - May 22, 2008 - **Geotechnical Earthquake Engineering & Soils Dynamics IV** - Sacramento, CA Email: rtucker@asce.org

May 18 - 24 - National Public Works Week More Info? Visit: www.apwa.net/About/NPWW/

May 18 - 21 - **TRB National Roundabout Conference** - Kansas City, MO, E-mail: TRBMeetings@nas. edu

May 18 - 21 - Inaugural Engineering Mechanics Conference 2008 - Minneapolis, MN More Info? Visit: www.cce.umn.edu/conferences/em08/

Jun 01 - 04 - International Bridge Conference - FHWA Featured Agency - Pittsburgh, PA - More Info? Visit: www.ibc.org

Jun 2 - 6 - **29th Annual Short Course on Grouting Fundamentals and Current Practice** - Golden, CO
More Info? Call (303) 273-3321

June 24-28 - 7th International Conference on Managing Pavement Assets: Investing in the Future, Calgary, CANADA, More Info? Visit: www.icmpa2008.com

Jun 25 - Jun 28, 2008 - 4th CINPAR - International Conference on Structural Defects and Repair - University of Portugal More Info? Visit: http://cinpar.web.ua.pt/EN/index.htm

For event details and contact information visit our website at:

www.fhwa.dot.gov/resourcecenter

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